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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,083	12/02/2003	Laibin Luo	2267.006	6021

21917 7590 03/23/2006  
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EXAMINER

ASINOVSKY, OLGA

ART UNIT PAPER NUMBER

1711

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Restriction only

## Office Action Summary

Application No.

10/727,083

Applicant(s)

LUO ET AL.

Examiner

Olga Asinovsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-123 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-123 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule.17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-32, drawn to a process for preparing diblock and triblock copolymer comprising the steps of: (a) preparing a hydroxyl-terminated poly(N-vinylpyrrolidone) in the presence of a radical initiator, a chain transfer agent and an alcoholic solvent and (b) forming a diblock and triblock copolymer by using a polymerizable (co)monomer(s) in the presence of a catalyst and the product from step (a), classified in class 525, subclass 7, 326.7, 326.9, 350 and subclass varied depending on a catalyst.
  - II. Claims 32-62, drawn to a process for preparing diblock and triblock copolymer comprising the steps of: (a) preparing a hydroxyl-terminated poly(N-vinylpyrrolidone) in the presence of a radical initiator, a chain transfer agent and an alcoholic solvent and (b) forming a diblock and triblock copolymer by using a polymerizable (co)monomer(s) in the presence of a base and the product from step (a), classified in class 525, subclass 7, 326.7, 326.9, 350 and subclass varied depending on a base.
  - III. Claims 63-92, drawn to a process for preparing diblock and triblock copolymer comprising the steps of: (a) preparing a hydroxyl-terminated poly(N-vinylpyrrolidone) in the presence of a radical initiator and an

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alcoholic solvent and (b) forming a diblock and triblock copolymer by using a polymerizable (co)monomer(s) in the presence of a catalyst and the product from step (a), classified in class 525, subclass 7, 326.7, 326.9 and subclass varied depending of a catalyst.

- IV. Claims 93-123, drawn to a process for preparing diblock and triblock copolymer comprising the steps of: (a) preparing a hydroxyl-terminated poly(N-vinylpyrrolidone) in the presence of a radical initiator and an alcoholic solvent and (b) forming a diblock and triblock copolymer by using a polymerizable (co)monomer(s) in the presence of a base and the product from step (a), classified in class 525, subclass 7, 326.7, 326.9 and subclass varied depending on a base.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Groups I+II and Groups III+IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions have different modes of operation and different effect because Groups I+II requiring a chain transfer agent whereas Groups II + IV do not have a chain transfer agent.
3. Inventions of Groups I +III and Groups II + IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions have different modes of operation

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and different effect, because each Invention of Groups I+III requires a catalyst, whereas each invention of Groups II + IV requires a base.

4. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

6. This application contains claims directed to the following patentably distinct species: (A) for monomers or comonomers, claims 2-6, 33-37, 64-68 and 94-98. (B) different conditions for isolation of a polyvinylpyrrolidone, claims 12-16, 20-22, 43-47, 51-53, 73-77, 81-83, 104-108, 112-114. (C) purifying of polyvinylpyrrolidone, claims 17-19, 23, 48-50, 54, 78-80, 84, 109-111 and 115.

7. The species are independent or distinct because each species in the process steps can be used as a separate process condition.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 6, 35, 67 and 96 are generic for (A). Claims 12 43, 73 and 104 are generic for purifying the polyvinylpyrrolidone by dissolution and precipitation (B). Claims 17, 48, 78 and 109 are generic for a purifying treatment polyvinylpyrrolidone (C).

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

8. In light of the complexity of the restriction requirement and election of the species, a telephone call was not made to request an oral election to the above restriction/election requirement.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

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Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

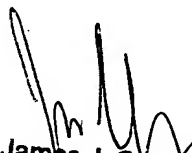
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*O.A.*

March 16, 2006

Olga Asinovsky  
Examiner  
Art Unit 1711

  
James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700